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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/761,703	01/18/2001	Takako Asahi	862.C2089	4719

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EXAMINER

DIVINE, LUCAS

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 09/23/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/761,703

Applicant(s)

ASAHI, TAKAKO

Examiner

Lucas Divine

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters “101” and “311” have each been used to designate more than one part in Fig. 3. “101” designates a box in the middle of the device as well as a part of the top. “311” designates a small piece on the top left as well as a tray on the top right.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

Fig. 2: 407, 408, 411

Fig. 3: 7, 19, 20, 22, 23, 420, 421, 1000

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

410 was mentioned on page 6 line 12 but is not in Fig. 2

110 was mentioned on page 7 line 6 and page 9 line 14 but is not in Fig. 3

300 was mentioned on page 10 line 7 but is not in Fig. 3

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the

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applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 8-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Kida et al. (US 5957450) hereafter referred to as Kida.

Regarding claim 10, Kida teaches **an image forming apparatus 1 which can be connected to a sheet processing apparatus 5 having a plurality of sheet storage units 52, and has a plurality of operation modes (uses copy, fax, printer, and other modes, col. 6 lines 46-47),**

wherein any one of the plurality of operation modes can be assigned to each of the plurality of sheet storage units (Fig. 24, col. 11 line 58, wherein, user selects which unit 52 to use with a selected mode), said apparatus comprising:

display control means capable of displaying display windows corresponding to the operation modes on a display device independently for the respective operation modes

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(operation panel in Fig. 5 includes control buttons 25, 26, and the like as well as touch panel liquid crystal display 6, col. 10 lines 65-67),

wherein when a display window corresponding to any one of the plurality of operation modes is to be displayed on the display device (the display window 6 inherently displays information corresponding to the selected operation mode in order to provide the user unique options and settings for each; for example, the fax mode has dialing options that would only be displayed for the fax mode), **setting of a sheet storage unit corresponding to the operation mode of the window to be displayed is executed in synchronism with display control of said display control means** (Fig. 24, wherein the setting of a sheet storage unit corresponding to chosen operation mode is displayed).

Regarding claim 13, the structural elements of apparatus claim 10 perform all of the steps of method claim 13. Claim 13 is therefore rejected for the reasons stated in the rejected claim 10. For example, the display 6 in Fig. 5 performs the **step capable of displaying display windows**. Examples analogous are applicable to the remaining limitations.

Regarding claim 14, the operation of the program storage medium of claim 14 performs the steps of method claim 13 within a computer readable medium. Therefore, claim 14 is rejected for the reasons stated in the rejection of method claim 13. Kida further teaches the use of a CPU 44 capable of performing the method steps as claimed in claim 13 as well as hard disk 43 to store the necessary program data and steps.

Regarding claim 8, Kida teaches **an image forming apparatus 1 which can be connected to a sheet processing apparatus 5 having a plurality of sheet storage units 52**,

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and has a plurality of operation modes (uses copy, fax, printer, and other modes, col. 6 lines 46-47),

wherein any one of the plurality of operation modes can be assigned to each of the plurality of sheet storage units (Fig. 24, col. 11 line 58, wherein the user selects which unit 52 to use with a selected mode), **said apparatus comprising:**

operation mode shifting means (wherein the ability to shift modes between printer, fax, and copy modes, such as by button 26, teaches an inherent shifting means for shifting modes) **for automatically shifting an operation mode of a final image formation job to a preset operation mode** (wherein the system of Kida is operable to receive jobs via a communication network or a phone line, col. 1 lines 20-28, teaching inherently that the system can store multiple jobs at once in memory 43; these *preset* jobs have the inherent settings of an operation mode – fax for jobs via phone line, printer for jobs via network – and thus when the next image formation job is to be completed, the mode would inherently shift as well) **before a new job is input** (the image formation jobs waiting in memory are processed before a new job is input from the operation panel in Fig. 5),

wherein the sheet processing apparatus is controlled to execute setting of a sheet storage unit corresponding to the preset operation mode along with the shift of the operation mode by said operation mode shifting means before the new job is input (col. 11 line 58 teaches the user being able to set a sheet storage unit corresponding to their selected operation mode; thus, when there *preset* job is output, the operation mode as well as the corresponding sheet storage unit shift accordingly).

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Regarding claim 9, which depends from claim 8, Kida further teaches a **display control means capable of displaying display windows corresponding to the operation modes on a display device independently for the respective operation modes** (touch panel liquid crystal display 6, col. 10 lines 65-67, displays information regarding modes of operation and options for each as they are selected),

when said operation mode shifting means shifts the operation mode, display control is performed to display a display window corresponding to the preset operation mode on the display device in synchronism with the control of the sheet processing apparatus (Fig. 24, wherein the setting of a storage unit corresponding to chosen operation mode is displayed).

Regarding claim 11, the structural elements of apparatus claim 8 perform all of the steps of method claim 11. Claim 11 is therefore rejected for the reasons stated in the rejected claim 8.

Regarding claim 12, the operation of the program storage medium of claim 12 performs the steps of method claim 11 within a computer readable medium. Therefore, claim 12 is rejected for the reasons stated in the rejection of method claim 11. Kida further teaches the use of a CPU 44 capable of performing the method steps as claimed in claim 13 as well as hard disk 43 to store the necessary program data and steps.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claim 1 – 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kida in view of Kawamura et al. (US 5587799) hereafter referred to as Kawamura.

Regarding claim 1, Kida teaches an image forming apparatus 1 which can be connected to a sheet processing apparatus 5 having a plurality of sheet storage units 52, and has a plurality of operation modes (uses copy, fax, printer, and other modes, col. 6 lines 46-47), comprising:

operation mode shifting means for shifting to any one of the plurality of operation modes (wherein the ability to shift modes between printer, fax, and copy modes, such as by button 26, teaches an implied shifting means for shifting modes); and

wherein when said operation mode shifting means shifts the operation mode, the sheet processing apparatus is controlled to function a sheet storage unit corresponding to the operation mode after the shift processing of said operation mode shifting means among the plurality of sheet storage units (col. 11 line 58 teaches the user being able to set a sheet storage unit 52a-f of sheet processing apparatus 5 to function corresponding to an operation mode further shown in Fig. 24).

While Kida teaches an image forming apparatus with operation modes and a standby routine (col. 20 lines 45-46), Kato does not specifically teach a **determining of a no-operation state for a predetermined time or shifting the operation mode based on the determining result**.

Kawamura teaches an image forming apparatus with operation modes **determination means for determining whether a no-operation state by an operator continues for a**

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predetermined time (col. 6 lines 4-5 and 12-13 teaches the determining the if a predetermined time has elapsed since the last user 'key' operation); **and**

operation mode shifting means for automatically shifting to any one of the plurality of operation modes on the basis of a determination result of said determination means (col. 6 lines 2-5 and 10-13 teach the shifting of operation modes -- normal or reserved -- based on the determination of an elapse of said predetermined time).

Kida and Kawamura are combinable because they both teach image forming apparatuses with operation modes, user operation areas, sheet storage units, and photocopy units.

It would have been obvious to one of ordinary skill in the art to shift modes based on the no-operation time determining unit of Kawamura in the mode-shifting device of Kida. The motivation for doing so would have been to automatically place the device in a 'default' or 'normal' mode if there has not been activity for a while, saving the next user time and effort if they (predictably) would want to use the 'normal' mode. This would be advantageous in the system of Kida because Kida teaches that the 'normal' mode of the taught invention is for copying (col. 1 line 29, wherein the normal mode is copying, and col. 11 line 41, wherein the taught invention returns to 'normal' mode when the reset key is hit). One can conclude that this 'normal' mode is the mode most used and therefore for it is most likely that a user will use this mode. Adding the determining unit of Kawamura would place the invention of Kida in the 'normal' mode after a certain no-operation time, and thus save the next user time and effort if they (predictably) would want to use the chosen 'normal' mode.

Regarding claim 2, which depends from claim 1, Kida further teaches that **the plurality of operation modes include a copying mode, facsimile mode, and printer mode** (col. 6 lines 46-47).

Regarding claim 3, which depends from claim 1, Kida further teaches that **wherein said apparatus further comprises a user interface including a display device commonly used in the respective modes** (operation panel of Fig. 5, which includes a display 6), **and**

when said operation mode shifting means shifts the operation mode, display control is performed to display a display window corresponding to the operation mode after the shift on the display device (the display window 6 displays information corresponding to the selected operation mode in order to provide the user unique options and settings for each; for example, the fax mode has dialing options that would only be displayed for the fax mode), **in synchronism with the control of the sheet processing apparatus** (Fig. 24, wherein the setting of a sheet storage unit corresponding to chosen operation mode is displayed).

Regarding claim 4, which depends from claim 1, Kida further teaches a system **further comprising first setting means for performing setting of executing shift processing of the operation mode by said operation mode shifting means** (Fig. 5 shows setting means for shifting operation modes, including specifically mode setting keys (col. 11 line 1) like key 24 (col. 11 line 53) and keys 25-27 (col. 11 lines 61-67)).

Regarding claim 5, which depends from claim 1, Kida further teaches a system **further comprising second setting means for performing setting of assigning any one of the plurality of operation modes to each of the plurality of sheet storage units** (Fig. 26, wherein the touch panel display 6 can be used to assign a storage unit to selected operation modes).

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Regarding claim 6, the structural elements of apparatus claim 1 perform all of the steps of method claim 6. Claim 6 is therefore rejected for the reasons stated in the rejected claim 1.

Regarding claim 7, the operation of the program storage medium of claim 7 performs the steps of method claim 6 within a computer readable medium. Therefore, claim 7 is rejected for the reasons stated in the rejection of method claim 6. Kida further teaches the use of a CPU 44 capable of performing the method steps as claimed in claim 13 as well as hard disk 43 to store the necessary program data and steps.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Naito et al., US 4821107, 4-11-1989 : teaches an imaging apparatus with print, copy, and fax modes as well as making decisions based on a no-operation elapsed time.

Kida et al., US 5971394, 10-26-1999 : teaches an image forming device with print, copy, and fax modes as well as discharge trays corresponding to each.

Maemura et al., US 6281980, 8-28-2001 : teaches an image processing system including coping, faxing, and printing as well setting parameters based on elapsed times.

Nanba et al., US 6406013, 6-18-2002 : teaches a sheet post-processing system with sheet storage bins directly corresponding to copy, fax, and print modes.

Mutoh et al., US 6606465, 8-12-2003 : teaches a function display method and multi-functional apparatus including display means for displaying settings and parameters for print, copy, and fax modes.

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Yamamoto, US 6618061, 9-9-2003 : teaches an input display device and method for switching processing functions including sorting options in a plurality of sheet output units in a system with copy, print, and fax modes.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lucas Divine whose telephone number is 703-306-3440. The examiner can normally be reached on Monday - Friday, 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on 703-308-7452. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lucas Divine
Examiner
Art Unit 2624

ljd



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